

#### ABSTRACT OF THE DISCLOSURE

Disclosed herein is an electropolishing apparatus including a polishing surface plate including a cathode and disposed turnably, a polishing pad disposed on the polishing surface plate, to be impregnated with an electropolishing liquid, and showing electric conduction from the face side to the back side thereof in the state of being impregnated with the electropolishing liquid, a substrate holding unit for holding a work substrate with a work surface of the work substrate opposed to a polishing surface of the polishing pad, the substrate holding unit turnably disposed at a position opposed to the polishing pad, an anode brought into contact with the work surface of the work substrate held by the substrate holding unit, a chemical liquid supply unit for supplying a chemical liquid used for polishing onto the polishing pad, and a power source for supplying electric power between the cathode and the anode.